

# **Proposal Reviews**

## **#257: AT-RISK PLANT SPECIES, HABITAT RESTORATION AND RECOVERY, AND NON-NATIVE INVASIVE SPECIES MANAGEMENT**

Yolo County Parks

**Initial Selection Panel Review**

**Research and Restoration Technical Panel Review**

**Sacramento Regional Review**

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**Environmental Compliance**

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## Initial Selection Panel Review:

### CALFED Bay-Delta 2002 ERP PSP Initial Selection Panel Review

**Proposal Number:** 257

**Applicant Organization:** Yolo County Parks

**Proposal Title:** AT-RISK PLANT SPECIES, HABITAT RESTORATION AND RECOVERY, AND NON-NATIVE INVASIVE SPECIES MANAGEMENT

Please provide an overall evaluation rating.

#### Explanation of Recommendation Categories: Fund

- **As Is** (a proposal recommended for funding as proposed)
- **In Part** (a proposal for which partial funding is recommended for selected project phases or components)
- **With Conditions** (a proposal for which funds are recommended if the applicant contractually agrees to meet the specified conditions)

**Consider as Directed Action in Annual Workplan** (a proposal addressing a high priority action that requires some revision followed by additional review prior to being recommended for funding)

**Not Recommended** (a proposal not currently recommended for funding-after revision may be considered in the future)

#### Note on "Amount":

For proposals recommended as Fund As Is, Fund In Part or Fund With Conditions, the dollar amount is the amount recommended by the Selection Panel.

For proposals recommended as Consider as Directed Action in Annual Workplan, the dollar amount is the amount requested by the applicant(s).

Fund	
As Is	-
In Part	X
With Conditions	-
Consider as Directed Action	-
Not Recommended	-

Amount:    **\$400,000**

Conditions, if any, of approval (if there are no conditions, please put "None"):

**Fund up to \$400,000, with a revised budget justification, subject to approval by CALFED, for work to be completed for this amount.**

Provide a brief explanation of your rating:

**This is one of very few well-designed non-native plant eradication proposals. The research team plans on doing baseline studies, evaluation of best eradication methods, development of conservation and management plans, and monitoring and adaptive management plans. There is some concern that the authors have not drawn from other studies on pepperweed eradication. The Selection Panel thinks the amount requested exceeds funds needed to fulfill the tasks designated, especially considering the limited acreage of native plants-of-concern, and the small size of the overall project. The Selection Panel requests that the authors address what components of the project can be completed with reduced funds.**

# Research and Restoration Technical Panel Review:

## CALFED Bay-Delta 2002 ERP PSP Research and Restoration Technical Panel Review Form

**Proposal Number:** 257

**Applicant Organization:** Yolo County Parks

**Proposal Title:** AT-RISK PLANT SPECIES, HABITAT RESTORATION AND RECOVERY, AND NON-NATIVE INVASIVE SPECIES MANAGEMENT

**Review:**

**Please provide an overall evaluation summary rating:**

**Superior:** outstanding in all respects;

**Above Average:** Quality proposal, medium or high regional value, and no significant administrative concerns;

**Adequate:** No serious deficiencies, no significant regional impediments, and no significant administrative concerns;

**Not Recommended:** Serious deficiencies, significant regional impediments or significant administrative concerns.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Superior	Overall this is an excellent proposal which will lead to information which will be needed to control pepperweed in vernal pool areas. The project will produce a conservation and management plan and adaptive management plan which will be very useful for this area. The panel recommends that a long term management plan also be developed at the end of the three year point.
XAbove average	
-Adequate	
-Not recommended	

1. **Goals and Justification.** Does the proposal present a clear statement of goals, objectives and hypotheses? Does the proposal present a clear justification and conceptual model for the project?

**A. Good to excellent** This proposal does a good job listing goals, tasks and has a good hypotheses, the hypotheses is reasonable and consistent throughout the proposal. **B. There is clear and good justification for the project and it has an excellent concept model, very clear statement, excellent literature review and a conservation effort is timely and important.** One reviewer noted however there is a danger of getting onto an herbicide treadmill, this absolutist, xenophobic, herbicide reliant mind-set is a fairly general problem in the field of restoration ecology and it does appear to dominate this proposal.

2. **Likelihood of Success (Approach, Feasibility, Capabilities and Performance Measures).** Is the project likely to succeed based on the approach, feasibility and project team capabilities? Are the proposed performance measures adequate for measuring the project's success?

**A. Yes the project is likely to succeed, the approach is well designed and expressed, the scale of the project is consistent with the objectives. This team has excellent capabilities. B. Yes, the conservation management plan will be of great value for keeping the area free of pepperweed if funding for continuous management can be found.**

3. **Outcomes and Products.** Will the project advance the state of scientific knowledge in general and/or make an important contribution to the state of knowledge of the Bay-Delta Watershed? For restoration proposals, is the project likely to contribute to ecosystem restoration or species recoveries in a significant way? Will the project produce products useful to decision-makers and scientists?

**A. Yes B. This project will generate products of value from the research and monitoring dimensions of the study. C. Yes it will help in management of the area.**

4. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

**Yes the budget is reasonable and in line with the level of experimental detail.**

5. **Regional Review.** How did the regional panel(s) rank the proposal (High, Medium, Low)? Did the regional panel(s) identify significant benefits (regional priorities, linkages with other activities, local involvement) or impediments (local constraints, conflicts with other activities, lack of local involvement) to this proposal? What were they?

**A. Sacramento Medium. B. It was noted that this proposal is very important to the area, but the scientific model needed a little more detail.**

6. **Administrative Review.** Were there significant concerns about the proposal with regard to the prior performance, environmental compliance and budget administrative reviews? What were they?

**A. OK, there will be a need for permits.**

**Miscellaneous comments:**

**None**

## **Sacramento Regional Review:**

**Proposal Number:** 257

**Applicant Organization:** Yolo County Parks

**Proposal Title:** AT-RISK PLANT SPECIES, HABITAT RESTORATION AND RECOVERY, AND NON-NATIVE INVASIVE SPECIES MANAGEMENT

Overall Ranking:    -Low    ☒Medium    -High

Provide a brief summary explanation of the committee's ranking:

**The issue is very important to the region because of the species addressed and lack of other similar vernal pool species. However, the proposal lacks a detailed scientific model, has no outreach plan for the results, and does not seem to draw on previous NIS work at places such as Beale AFB, Jepson Prairie and others.**

1. Is the project feasible based on local constraints?

☒Yes -No

How?

**They have access to the site, support of the Board of Supervisors & County Agencies, which the review panel was very excited about. A consulting team is available for the project.**

2. Does the project pursue the restoration priorities applicable to the region as outlined in the PSP?

☒Yes -No

How?

**The project meets the basic ERP priorities of the "Multi-Region Bay Delta areas in the area of NIS Control & Eradication. It touches the following areas: Implement NIS detection, monitoring & control programs, it addresses pepperweed; develops & evaluates integrated methods of NIS control; assesses success & impacts of control efforts. It also addresses 2 CALFED identified at-risk species, Crampton's Tuctoria & alkali Milk-vetch.**

3. Is the project adequately linked with other restoration activities in the region, such as ongoing implementation projects and regional planning efforts?

-Yes ☒No

How?

**While mention is made of projects at Jepson Prairie & potential links to other preserves (Yolo Bypass, Calhoun Cut, & Jepson Prairie), no specific actions for information transfer or cooperation are mentioned, so the connection is unclear.**

4. Does the project adequately involve local people and institutions?

-Yes XNo

How?

**See previous comments.**

Other Comments:

**This project supports critical populations and habitat for 2 CALFED at-risk and several other species not listed within this PSP, but that are on CALFED's special status list. The project would add important data to state and federal databases &, if appropriate scientific standards are applied, will develop additional experimental data on eradication methodology for pepperweed. Its greatest weaknesses are its undemonstrated use of previous NIS work, the potential for NEPA/CEQA timing holding up the project, & its lack of an outreach plan for the results.**

## External Scientific: #1

### Research and Restoration External Scientific Review Form

Proposal Number: **257**

Applicant Organization: **Yolo County Parks**

Proposal Title: **AT-RISK PLANT SPECIES, HABITAT RESTORATION AND RECOVERY, AND NON-NATIVE INVASIVE SPECIES MANAGEMENT**

#### Conflict of Interest Statements:

I have no financial interest in this proposal.

**X**Correct

-Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

**None**

#### Review:

**Please provide an overall evaluation summary rating:**

**Excellent: outstanding in all respects;**

**Good: quality but some deficiencies;**

**Poor: serious deficiencies.**

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
<b>X</b> Excellent	<b>Overall this is a excellent sound proposal which will lead to information which will be needed to control pepperweed in vernal pool areas.</b>
-Good	
-Poor	

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

**Excellent, yes, yes.**

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

**Excellent, yes, yes, yes.**



3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

**Excellent, yes, yes, yes, yes.**

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

**Excellent, yes, good, yes.**

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

**Very good, yes, yes.**

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

**Excellent, yes, yes, yes.**

7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

**Excellent, good, yes, yes.**

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

**Very good, yes.**

**Miscellaneous comments:**

## External Scientific: #2

### Research and Restoration External Scientific Review Form

Proposal Number: **257**

Applicant Organization: **Yolo County Parks**

Proposal Title: **AT-RISK PLANT SPECIES, HABITAT RESTORATION AND RECOVERY, AND NON-NATIVE INVASIVE SPECIES MANAGEMENT**

#### Conflict of Interest Statements:

I have no financial interest in this proposal.

**X**Correct

-Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

**None**

#### Review:

**Please provide an overall evaluation summary rating:**

**Excellent: outstanding in all respects;**

**Good: quality but some deficiencies;**

**Poor: serious deficiencies.**

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	<b>A management plan for the area will be a valuable tool to help preserve the vernal pools at the site. Because there is no assurance of ongoing funding, I have reservations about the success of the management plan. This plan should be compared to other proposals for pepperweed management to avoid duplication.</b>
XGood	
-Poor	

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

**The goal of the overall proposal is clear; to protect, manage, and restore habitat quality of vernal pool wetlands in the Sacramento Valley Region. The objectives, however, are much broader in scope, including improving upland habitat through eradication of upland nonindigenous species (NIS). The goal should be restated to include both wetland and upland restoration and management. The hypothesis appears to be that eradication of NIS is the key to protecting, managing and restoring this habitat. This is a reasonable hypothesis and is consistent throughout the proposal.**

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

**The presence of NIS is clearly one of the greatest threat to native habitats in California. This study is clearly justified. The conceptual model adequately outlines the need for NIS removal and explains the need to perform experimental eradication using a variety of techniques in order to protect sensitive resources and determine the efficacy of the treatment options. The combination of research, and demonstration project are justified. However, the limit to a three year program will limit the success if additional funding does not become available after the management plan is developed. This proposal does not recognize the need for a full-scale, long-term activities once appropriate management is determined.**

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

**The approach is appropriate for meeting many of the project objectives. The project only proposes to measure impacts to sensitive species, not quantify technique efficacy. Some of the techniques proposed (manual removal, prescribed burning) may not completely eradicate the pepperweed. The proposal does not adequately outline how these techniques will be evaluated and how success will be measured. If this efficacy is evaluated the project may generate new information although studies of eradication techniques have been done in the past. The information will be useful to decision makers if the experiments show methods to protect sensitive species while removing NIS to restore native habitat.**

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

**The project proposes to develop a management plan for sensitive species that includes the removal of NIS. This is feasible, but I am not certain that long-term solutions will be addressed. The plan will incorporate adaptive management and this may address my concerns.**

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

**The monitoring and adaptive management plan will identify monitoring activities, so they are not meant to be identified at this time. The monitoring proposed, however, must include NIS surveys as well as sensitive species surveys if success of eradication techniques is to be evaluated. It is not clear that this is the intent.**

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

**The Conservation and Management Plan will be of great value for keeping the area free of pepperweed if funding for continuous management can be found.**

7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

**I am not aware of the track record of the applicants but the team looks very well qualified and includes a diversity of expertise. Adequate infrastructure is in place and should be able to support the project**

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

**At first glance the budget appears excessive. However, the level of experimental detail proposed as well as the completion of a management plan that can be modified for similar projects seem to warrant the funding request.**

**Miscellaneous comments:**

**The plan will be most helpful if the management plan provides a set of scientific protocol for various eradication methods that protect sensitive resources and endangered species.**

## External Scientific: #3

### Research and Restoration External Scientific Review Form

Proposal Number: **257**

Applicant Organization: **Yolo County Parks**

Proposal Title: **AT-RISK PLANT SPECIES, HABITAT RESTORATION AND RECOVERY, AND NON-NATIVE INVASIVE SPECIES MANAGEMENT**

#### Conflict of Interest Statements:

I have no financial interest in this proposal.

**X**Correct

-Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

**Institution connection. I am employed by the University of California, Davis as are Craig Thomsen and Niall McCarten.**

#### Review:

**Please provide an overall evaluation summary rating:**

**Excellent: outstanding in all respects;**

**Good: quality but some deficiencies;**

**Poor: serious deficiencies.**

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
<b>X</b> Excellent	<b>This a well crafted proposal that will certainly produce valuable results.</b>
-Good	
-Poor	

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

**The projects primary goal to protect, manage, and restore habitat of CALFED At-risk species is clearly stated and is consistent with the proposed tasks. A number of very important objectives and products are also associated with the primary goal and they are also clearly stated and logically related to the proposed tasks.**

**Both the overall goal and its specific objectives are very timely. The project is critically important because it will protect an alkali soil vernal pool complex that contains the largest known population of one At-risk species. The most immediate threat to the survival of that species and another At-risk species is the invasion of the pool complex by *Lepidium latifolium*, a CALFED non-native invasive species (NIS). The stated objectives are closely integrated and clearly address both At-risk species management problems as well as NIS**

**management issues.**

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

**The project tasks will greatly increase the level of knowledge needed to effectively manage the At-risk species, their extremely rare habitat, and *Lepidium latifolium*. A formal management plan will be produced that will address both the pool complex as well as potential off-site impacts from an adjacent regional park. Additionally, the information in the management plan will be extremely useful for the management of other vernal pools and the eradication of *Lepidium latifolium*.**

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

**The plan proposes a closely integrated series of five tasks to be completed over a period of three years. Contingency plans are also developed for both wet and drought year research.**

**Task 1 Baseline studies. The methods are necessary in order to quantify important biological and environmental factors that may be impacted by management efforts.**

**Task 2 Non-native species eradication studies. The authors advocate a cautious experimental approach that integrates NIS eradication efforts on the uplands as well as in the pools. The experimental design will use both control and treatment plots to test a series of eradication alternatives.**

**Task 3 Conservation and Management Plan. The information developed in Tasks 1 and 2 will be incorporated into a management plan for the pools and will include information related to the adjacent regional park.**

**Task 4 Monitoring and Adaptive Management Plan. The monitoring plan is a continuation of Task 1 and will provide critically important information for the management of the pools.**

**Task 5 Environmental Documentation. The necessary environmental documents will be obtained.**

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

**The approach is well designed, fully documented and technically feasible. NIS eradication efforts are never a sure thing but the project should have a high probability of success.**

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

**The performance measures are clearly stated and appropriate to the projects goals and objectives. The monitoring plan is clear and it explicitly defines the methods and criteria to be used in evaluating the performance of the project.**

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

**The project will produce a Conservation and Management Plan and a Adaptive Management Plan. The information in each plan will be invaluable for the management of similar pool complexes and for the eradication of *Lepidium latifolium* in pool complexes and in other similar habitat.**

7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

**Each of the principles has a strong track record of success in their field and their staff appear to be well qualified.**

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

**The budget appears reasonable and the products will be leveraged by other managers.**

**Miscellaneous comments:**

**None.**

## Environmental Compliance:

**Proposal Number:** 257

**Applicant Organization:** Yolo County Parks

**Proposal Title:** AT-RISK PLANT SPECIES, HABITAT RESTORATION AND RECOVERY, AND NON-NATIVE INVASIVE SPECIES MANAGEMENT

1. Are the legal or regulatory issues that affect the proposal identified adequately in the proposal?

-Yes **X**No

If no, please explain:

**Project proponent needS to confirm that herbicide use will not require permits or agreements from local, state, or federal entities. Not enough detail in the proposal on methods of application to determine whether additional permits would or would not be required.**

2. Does the project's timeline and budget reflect adequate planning to address legal and regulatory issues that affect the proposal?

**X**Yes -No

If no, please explain:

3. Do the legal and regulatory issues that affect the proposal significantly impair the project's feasibility?

-Yes **X**No

If yes, please explain:

**If any additional permits are required for pesticide application, they should not be a problem to obtain. This project is feasible.**

Other Comments:



## **Budget:**

**Proposal Number:** 257

**Applicant Organization:** Yolo County Parks

**Proposal Title:** AT-RISK PLANT SPECIES, HABITAT RESTORATION AND RECOVERY, AND NON-NATIVE INVASIVE SPECIES MANAGEMENT

1. Does the proposal include a detailed budget for each year of requested support?

**X**Yes -No

If no, please explain:

2. Does the proposal include a detailed budget for each task identified?

**X**Yes -No

If no, please explain:

3. Does the proposal clearly state the type of expenses encompassed in indirect rates or overhead costs?

**X**Yes -No

If no, please explain:

4. Are appropriate project management costs clearly identified?

**X**Yes -No

If no, please explain:

5. Do the total funds requested (Form I, Question 17A) equal the combined total annual costs in the budget summary?

**X**Yes -No

If no, please explain (for example, are costs to be reimbursed by cost share funds included in the budget summary).

6. Does the budget justification adequately explain major expenses?

**X**Yes -No

If no, please explain:

7. Are there other budget issues that warrant consideration?

-Yes ☒No

If yes, please explain:

Other Comments:

**the information is justified in the budget summary and justification.**